

IN THE CLAIMS

This listing of claims will replace all prior version, and listings, of claims in the application:

1. (Currently Amended) A method of generating a network zone plan, comprising:

~~collecting device~~ collecting connectivity information using a plurality of software agents in every principal switch and host for devices in a storage network;

~~performing an analysis on the collected information to infer relationships between the devices;~~

reporting by the software agents the configuration data to a configuration database;

reporting by the software agents the storage configuration of the host to a identifying policies to be utilized in generating a zone plan of the network, wherein said policies include granularity, type of storage device, and grouping; storage subsystem; and

performing an analysis on the collected information to infer relationships between the devices;

~~generating the zone plan based on a combination of the analysis performed and the identified zoning policies, and~~

~~implementing said zone plan in a SAN~~

whereby the zone plan generator adds storage devices to existing zones or allocates a new zone plan based on user generated zone policies.

2. (Canceled)

3. (Currently Amended) The method of claim 1 wherein the zone plan dictates visibility of devices in the zone instead restricting within or between the zones.~~which of the devices are~~

~~visible to each other.~~

4. (Currently Amended) The method of claim 3 wherein size of the zone is an attribute specified by the system administrator~~devices include host systems to access data and storage subsystems which are providers of data.~~

5. (Currently Amended) The method of claim 4 ~~wherein the zone plan is a network layer access control mechanism which dictates which storage subsystems are visible to which hosts~~ 3 wherein the storage relationship and network path connectivity between host and storage subsystem are done by correlating the information and by appropriate topological search.

6. (Canceled)

7. (Currently Amended) A computer program product having instruction codes for providing autonomic zoning in a storage area network, comprising:

a first set of instruction codes for collecting device connectivity information for devices in a network;

a second set of instruction codes for performing an analysis on the collected information to infer relationships between the devices;

a third set of instruction codes for identifying policies to be utilized in generating a zone plan of the network; and

a fourth set of instruction codes for generating the zone plan based on a combination of the analysis performed and the identified administrator defined zoning policies.

8. (Canceled)

9. (Currently Amended) The computer program product of claim 7 wherein the data is collected from all devices in the SAN periodically or when a physical change in the configuration occurs.~~zone plan dictates which of the devices are visible to each other.~~

10. (Currently Amended) The computer program product of claim 9 wherein the port-to-port connectivity's of the storage area network is inferred from the graph structure obtained as a result of the analysis ~~devices include host systems to access data and storage subsystems which are providers of data.~~

11. (Currently Amended) The computer program product of claim 10 wherein the granularity, device, size and type are the attributes used to generate zone policy.~~the zone plan is a network-layer access control mechanism which dictates which storage subsystems are visible to which hosts.~~

12. (Canceled)

13. (Canceled)